

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In application of:

QUIGLEY *et al.*

Appl. No.: 09/780,179

Filed: February 9, 2001

For: **Robust Techniques For Optimal  
Upstream Communication Between  
Cable Modem Subscribers And A  
Headend**

Confirmation No.: 9211

Art Unit: 2661

Examiner: Ian N. Moore

Atty. Docket: 1875.1320001

**RECEIVED**

NOV 19 2004

Technology Center 2600

**First Supplemental Information Disclosure Statement**

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

Listed on accompanying Form PTO-1449 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98. The numbering on this First Supplemental Information Disclosure Statement is a continuation of the numbering in Applicants' Information Disclosure Statement filed on February 9, 2001 in connection with the above-captioned application.

Where the publication date of a listed document does not provide a month of publication, the year of publication of the listed document is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the month of publication is not in issue. Applicants have listed publication dates on the attached PTO-1449 based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

Applicants have checked the appropriate boxes below.

- ☐ 1. Statement under 37 C.F.R. 1.704(d). Each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of this information disclosure statement.
- ☐ 2. Filing under 37 C.F.R. § 1.97(b). This Information Disclosure Statement is being filed within three months of the date of filing of a national application other than a continued prosecution application (CPA), OR within three months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application, OR before the mailing date of a first Office Action on the merits OR before the mailing of a first Office Action after the filing of a request for continued examination under 37 C.F.R. § 1.114. No statement or fee is required.

☒ 3. Filing under 37 C.F.R. § 1.97(c). This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection, or Notice of Allowance, or an action that otherwise closes prosecution in the application.

☐ a. Statement under 37 C.F.R. § 1.97(e)(1). I hereby state that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(1).

☐ b. Statement under 37 C.F.R. § 1.97(e)(2). I hereby state that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2).

☒ c. Attached is our PTO-2038 Credit Card Payment Form in the amount of \$180.00 in payment of the fee under 37 C.F.R. § 1.17(p).

- ☐ 4. Filing under 37 C.F.R. § 1.97(d) This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of a Final Rejection or Notice of Allowance, but before payment of the Issue Fee. Enclosed find our PTO-2038 Credit Card Payment Form in the amount of \$\_\_\_\_\_ in payment of the fee under 37 C.F.R. § 1.17(p); in addition:

☐ a. Statement under 37 C.F.R. § 1.97(e)(1). I hereby state that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(1).

☐ b. Statement under 37 C.F.R. § 1.97(e)(2). I hereby state that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2).

- ☐ 5. The document(s) was/were cited in a search report by a foreign patent office in a counterpart foreign application. Submission of an English language version of the search report that indicates the degree of relevance found by the foreign office

is provided in satisfaction of the requirement for a concise explanation of relevance. 1138 OG 37, 38.

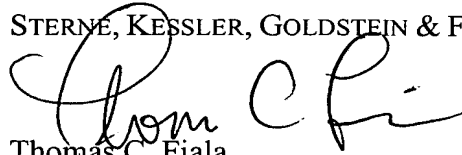
- ☐ 6. A concise explanation of the relevance of the non-English language document(s) appears below in accordance with 37 C.F.R. § 1.98(a)(3).
- ☐ 7. Copies of documents \_\_\_\_\_ are submitted. However, in accordance with 37 C.F.R. § 1.98(a)(2), no copies of U.S. patents and patent application publications cited on the attached Form PTO-1449 are submitted.
- ☒ 8. Copies of the documents were cited by or submitted to the Office in an IDS that complies with 37 C.F.R. § 1.98(a)-(c) in Application No. 09/574,558, filed May 19, 2000, which is relied upon for an earlier filing date under 35 U.S.C. § 120. **Thus, copies of these documents are not attached. 37 C.F.R. § 1.98(d).**
- ☐ 9. It is expected that the examiner will review the prosecution and cited art in the parent application no(s). \_\_\_\_\_ in accordance with MPEP 2001.06(b), and indicate in the next communication from the office that the art cited in the earlier prosecution history has been reviewed in connection with the present application.

It is respectfully requested that the Examiner initial and return a copy of the enclosed Form PTO-1449, and indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

A handwritten signature in black ink, appearing to read "Tom C Fiala", written over the printed name.

Thomas C. Fiala  
Attorney for Applicants  
Registration No. 43,610

Date: 11/12/04

1100 New York Avenue, N.W.  
Washington, D.C. 20005-3934  
(202) 371-2600



FORM PTO-1449

ATTY. DOCKET NO.  
1875.132000IAPPLICATION NO.  
09/780,179

INFORMATION DISCLOSURE STATEMENT

FIRST NAMED INVENTOR: QUIGLEY et al.

FILING DATE: February 9, 2001

ART UNIT: 2661

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA1	5,631,846	05/1997	Szurkowski			
	AB1	4,383,272	05/1983	Netravali et al.			
	AC1	4,520,490	05/1985	Wei			
	AD1	4,617,676	10/1986	Jayant et al.			
	AE1	4,941,154	07/1990	Wei			
	AF1	4,958,226	09/1990	Haskell et al.			
	AG1	5,115,453	05/1992	Calderbank et al.			
	AH1	5,227,878	07/1993	Puri et al.			
	AI1	5,339,384	08/1994	Chen			
	AJ1	5,341,457	08/1994	Hall, II et al.			
	AK1	5,488,633	01/1996	Laroia			

RECEIVED

NOV 19 2004

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL1	0 548 318	06/1993	EPO			Yes No
	AM1	0 748 120	12/1996	EPO			Yes No
	AN1	0 768 769	04/1997	EPO			Yes No
	AO1	10-243371	09/1998	Japan			Yes No
	AP1	2 312 362	10/1997	United Kingdom			Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

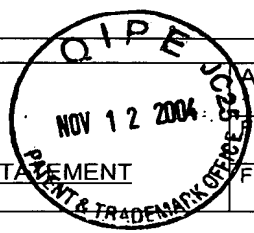
	AR	1	Thomas J. Kolz, "Upstream HFC Channel Modeling and Physical Layer Design", General Instruments Corporation, SPIE Vol. 2917, 11/1996, pp. 240-251
	AS	1	James E. Dail, et al., "Adaptive Digital Access Protocol: A MAC Protocol for Multiservice Broadband Access Networks", AT&T Bell Laboratories, 2460 IEEE Communications Magazine 34, 03/1996, pp. 104-112.
	AT	1	Robert Wolters, et al., "An Initialisation for a Burst-Mode Transport HFC System with Delay Determination by Power Distribution Measurement", Alcatel Telecom Research Division, SPIE Vol. 3233, 11/1997, pp. 353-360.

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

Page 2 of 3	
FORM PTO-1449	<div style="display: flex; justify-content: space-between;"> <div> ATTY. DOCKET NO. 875.1320001 </div> <div> APPLICATION NO. 09/780,179 </div> </div>
INFORMATION DISCLOSURE STATEMENT	FIRST NAMED INVENTOR: QUIGLEY et al. FILING DATE: February 9, 2001      ART UNIT: 2661



### U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA2	5,579,513	11/1996	Strohmer			
	AB2	5,627,938	05/1997	Johnston			
	AC2	4,928,272	05/1990	Ohue			
	AD2	5,710,765	01/1998	Lee et al.			
	AE2	5,640,424	06/1997	Banavong et al.			
	AF2	5,696,765	12/1997	Safadi			
	AG2	5,881,363	03/1999	Ghosh et al.			
	AH2	5,943,604	08/1999	Chen et al.			
	AI2	6,108,713	08/2000	Sambamurthy et al.			
	AJ2	6,137,793	10/2000	Gorman et al.			
	AK2						

**RECEIVED**  
 NOV 19 2004  
 Technology Center 2600

### FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL2	97/10553	03/1997	WIPO			Yes No
	AM2	97/15129	04/1997	WIPO			Yes No
	AN2	97/16046	05/1997	WIPO			Yes No
	AO2	97/41691	11/1997	WIPO			Yes No
	AP2	0 353 779	02/1990	EPO			Yes No

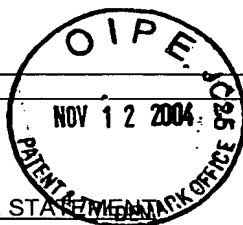
### OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	2	Bharat T. Doshi, et al., "A Broadband Multiple Access Protocol for STM, ATM, and Variable Length Data Services on Hybrid Fiber-Coax Networks", Bell Labs Technical Journal, 06/1996, pp. 36-65.
	AS	2	John O. Limb, "A Protocol for Efficient Transfer of Data Over Hybrid Fiber/Coax System", IEEE/ACM Transactions on Networking, Vol. 5, No. 6, 12/1997, pp. 872-881.
	AT	2	Copy of International Search Report dated July 28, 2000 relating to corresponding International Application No. PCT/US99/25675, 6 pages.

EXAMINER	DATE CONSIDERED
----------	-----------------

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.





FORM PTO-1449

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1875.1320001APPLICATION NO.  
09/780,179

FIRST NAMED INVENTOR: QUIGLEY et al.

FILING DATE: February 9, 2001

ART UNIT: 2661

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA3						
	AB3						
	AC3						
	AD3						
	AE3						
	AF3						
	AG3						
	AH3						
	AI3						
	AJ3						
	AK3						

RECEIVED  
NOV 19 2004  
Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL2						Yes No
	AM2						Yes No
	AN2						Yes No
	AO2						Yes No
	AP2						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	<u>3</u>	Declaration of Lisa V. Denney, executed August 14, 2002, including attached Exhibits 1, 2 and 3.
	AS	<u>3</u>	
	AT	<u>3</u>	

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.